Section-A

Multiple Choice Questions (MCQ's)

Q-01: Choose the correct answer for each from the given option.

(i) if "b" is a real number, the point (0,b) lies in/on ......

(a) 2^{nd} quadrant (b) 3^{rd} quadrant (c) x – axis (d) y – axis

(ii) $x + 4 = y$ and $y = 6 \Rightarrow x + 4 = 6$, this properties is called ....

(a) Reflexive property (b) Symmetric property

(c) Transitive property (d) Additive property

(iii) Total number of digits in 2^{25} are.....

(a) 8 (b) 9 (c) 10 (d) 11

(iv) The degree of the polynomial $x^2 + xy^2 + y$ is ....

(a) 1 (b) 2 (c) 3 (d) 4

(v) L.C.M of $x^3 + 8$ and $x + 2$ is ....

(a) $x^2 + 2x + 4$ (b) $x^3 - 8$ (c) $x^3 + 8$ (d) $x^4 + 16$

(vi) If $a + b = 2$ and $a - b = 2$, then the value of $a^2 + b^2$ is ....

(a) 2 (b) 3/2 (c) -1 (d) 4

(vii) The method of obtaining a relation independent of any particular variable is called ....

(a) Rationalization (b) Addition (c) Elimination (d) Equation

(viii) if $A = \begin{vmatrix} a & b \\ c & d \end{vmatrix}$, then ad – bc is called .... Of matrix A.

(a) Conjugate (b) Determinent (c) Transpose (d) None

(ix) The solution set of the simultaneous equation $x + y = 5$ and $2x - y = 7$ is ....

(a) {4 , 1} (b) {(1,4)} (c) {)4,1)} (d) {2,3}

(x) ifq,p, r are in continued proportion, then ....

(a) $P^2 = q^2 r^2$ (b) $P^2 = (qe)^2$ (c) $P = q^2 r^2$ (d) $P^2 = qr$

(xi) Sum of 10 observations is 125, the mean is ....

(a) 12.5 (b) 1.25 (c) 1250 (d) None

(xii) The angles whose arms form two pairs of opposite rays are called.....

(a) Supplementary angles (b) Complementary angles

(c) Vertically opposite angles (d) Adjacent angles

(xiii) ...... is the point of concurrency of the medians of a triangle.

(a) Centriod (b) E-Centre (c) Orthocentre (d) In-centre

(xiv) If the corresponding angles of two polygons are congruent then their corresponding sides are.......

(a) Congruent (b) Equal (c) Proportional (d) None

(xv) If r = {(a,b). (C,d), (e,f)}, then Range R = ...

(a) {a,b,c} (b) {b,d,f} (c) {a,c,e} (d) {d,e,f}

(xvi) From a point outside the circle ...... tangent can be drawn to the circle.

(a) 1 (b) 2 (c) 3 (d) None

(xvii) If $(x - 1)(x + 3) = 0$, then x = ...

(a) 1,3 (b) -1,-3 (c) -1 , 3 (d) 1,-3

(xviii) If a:b = c :d, then a:c = b : d this property of proportion is called ....

(a) Dividendo (b) Alternendo

(c) Invertendo (d) Componendo

(xix) Which of the following statement is not true.

(a) Cos 10° = sin 80° (b) tan30° = cot 60°

(c) sec 35° = cosec 65° (d) tan 30° = 1/cot30°

(xx) Cosec (90° – θ) = ...

(a) sinθ (b) cosθ (c) sec θ (d) None